

Profile of a Fisheries Biologist:
Albert Spells, USFWS fisheries biologist, Virginia Fisheries Coordinator Office,
First American Shad Schools-In-Schools Program

Albert Spells is a fisheries biologist with the U.S. Fish and Wildlife Service. Part of his job is to study fish that are declining in number and work to help restore them. He does this by studying the fishes' ecosystem to learn its diet and habitat requirements in order to develop a plan to help restore its numbers.

Mr. Spells was the supervisor of Harrison Lake National Fish Hatchery in Virginia, which was the first hatchery to raise American shad. Through his vision and leadership, the U.S. Fish and Wildlife Service began restoring American shad to Chesapeake Bay rivers by raising and releasing shad.



Albert Spells examines hatching jars for American shad at the Harrison Lake National Fish Hatchery.

Albert was one of the pioneers of the *Schools-in-Schools* program that got students in local schools involved in raising and releasing the shad.

In 1996, Mr. Spells drove thousands of American shad “fry” packed in little bags filled with pure oxygen from the Harrison Lake Hatchery to four schools in the Washington, D.C. area. Students continued raising these shad in their classroom in tanks designed by Mr. Spells and his staff. Two weeks later, the students gathered on the shores of the Potomac River and released them into the waterway. Students now raise shad from eggs and have raised tens of thousands of shad.

In addition to restocking shad, Mr. Spells and other biologists are trying to restore the habitat that shad need to lay their eggs, the once free-flowing rivers of Virginia. Albert works with partners to provide shad, and other migratory fish, with passage by dams blocking their migration. Fish passages can be placed in dams or the dams can be removed to permit migration. Mr. Spells has been involved in eight dam removals and has worked to provide numerous [fish passages on rivers in Virginia](#) that flow into the Chesapeake Bay. When he is not working on fish passage, he is working on many other projects such as assessing the rare [Atlantic sturgeon](#) population in the Chesapeake Bay and is helping to protect and restore habitats that affect aquatic systems. Mr. Spells enjoys reaching out to the public to inform and educate others on our natural aquatic wonders. He is a true steward of the aquatic ecosystem.

A television show first inspired Mr. Spells to pursue a career helping aquatic species.

"I got into the fisheries arena because of Jacques Cousteau, and a TV show called *Wild Kingdom*," Mr. Spells said. "When I was a boy there were no shows such as Blue Planet, nor were there channels such as National Geographic. But there was Jacques Cousteau, and I would dream of experiencing the kinds of things that he demonstrated during those telecasts and would proceed to read about the animals depicted in the shows."

On a return visit with his brother to a stream where he used to fish and explore, they were not happy with what they found.

"When I was little, a stream I called 'little stream' flowed from a millpond near my house," Mr. Spells said. "Little stream was not much of a fish area, but it was our fishing hole which hardly ever disappointed us. One day when I was on spring break from South Carolina State College, my brother and I went to go fishing and when we arrived, we found that our stream was ruined because of litter on its banks and in the water. It was at that moment that I knew I wanted to work in the aquatic ecology arena."

Thirty years later, Mr. Spells is happy with his career decision.

"What I find most satisfying about my work is believing that I am making a small difference helping to conserve our aquatic resources for future generations to enjoy. I also get satisfaction from helping at least a small segment of our society to learn about our aquatic resources, and hopefully help them develop a conservation ethic and an appreciation for what we have been blessed with ecologically in this country."

Through Mr. Spells vision and those of the other *Schools in Schools* pioneers, the American shad in the schools program has grown to more than 100 schools in four states, including the most recent schools in North Carolina.